



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,866	12/11/2003	Daron Chris Hill	KCC-4978 (K-C 19,075)	8069
321 7590 04/21/2008 SENNIGER POWERS LLP ONE METROPOLITAN SQUARE 16TH FLOOR ST LOUIS, MO 63102				
EXAMINER ENGLAND, DAVID E				
ART UNIT 2143		PAPER NUMBER		
NOTIFICATION DATE 04/21/2008		DELIVERY MODE ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

uspatents@senniger.com

Office Action Summary

Application No.

10/733,866

Applicant(s)

HILL ET AL.

Examiner

DAVID E. ENGLAND

Art Unit

2143

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SE/US)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1 – 41 are presented for examination.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 – 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tunncliffe et al. (6272110), hereinafter Tunncliffe, in view of Datta et al. (6209033), hereinafter Datta.
4. Referencing claim 1, as closely interpreted by the Examiner, Tunncliffe teaches a method of maintaining capacity of a network comprising:
5. defining future times at which a capacity of the network is evaluated, (e.g., col. 4, lines 20 – 59);
6. determining a total capacity of the network (TNC) at each of the future times, (e.g., col. 4, lines 20 – 59);
7. determining a total demand of users (TUD) for the network at each of the future times, (e.g., col. 4, lines 20 – 59, col. 5, lines 4 – 55);
8. determining a predicted utilization (PU) of the network at each of the future times as a function of the total demand of users (TUD) and the total capacity of the network (TNC) , (e.g., col. 4, lines 20 – 59, col. 5, lines 4 – 55);

Art Unit: 2154

9. defining an acceptable utilization of the network at each of the future times, (e.g., col. 4, lines 20 – 59, col. 5, lines 4 – 55);
10. comparing the predicted utilization (PU) of the network to the acceptable utilization of the network at each of the future times, (e.g., col. 4, lines 20 – 59, col. 5, lines 4 – 55); and
11. determining in response to the comparing, for each future time, a change in network capacity (DCNC) to be applied to the network in order to increase or decrease the capacity of the network, (e.g., col. 4, lines 20 – 59, col. 5, lines 4 – 55), but does not specifically teach the change in total network. Datta teaches the change in total network, (e.g., col. 6, line 65 – col. 7, line 9). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Datta's changing of the entire network with Tunnicliffe's teachings of specific changes in bandwidth and client capacity since it has been held that mere duplication of parts, i.e. utilizing Tunnicliffe's one device increase or decrease of bandwidth in multiple devices what would make up an entire network such as Datta, would only take one of ordinary skill to perform, *In re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1960).
12. Applicant should further noted that the limitations above do not suggest an actual change in total network capacity. All that is stated is it is determined what the total change to be applied to the network, which means there is no step in actually applying the change.
13. Referencing claim 2, as closely interpreted by the Examiner, Tunnicliffe teaches the acceptable utilization comprises a maximum acceptable utilization (MaxAU) of the network and a minimum acceptable utilization (MinAU) of the network, (e.g., col. 3, lines 22 – 55).

14. Referencing claim 3, as closely interpreted by the Examiner, Tunnicliffe teaches applying the determined change in network capacity (DCNC) to the network, (e.g., col. 4, lines 20 – 59, col. 5, lines 4 – 55).

15. Referencing claim 4, as closely interpreted by the Examiner, Tunnicliffe teaches determining at each of the future times a lead time for adding product for applying the determined change in network capacity (DCNC) to the network , (e.g., col. 4, lines 20 – 59, col. 5, lines 4 – 55); and

16. in advance of each future time based on the lead time determined with respect to each particular future time, initiating efforts to obtain product for applying the determined change in network capacity (DCNC) , (e.g., col. 4, lines 20 – 59, col. 5, lines 4 – 55).

17. Referencing claim 5, as closely interpreted by the Examiner, Tunnicliffe teaches the lead time is a function of an installation time for installing said product and an advance purchase time for obtaining said product , (e.g., col. 3, lines 22 – 55).

18. Referencing claim 6, as closely interpreted by the Examiner, Tunnicliffe teaches determining a total capacity of the network (TNC) at each of the future times is a function of determining a present capacity of the network (PNC) and identifying a planned change in network capacity (PCNC) to be applied the network between a present time and each of the

future times , (e.g., col. 3, lines 22 – 55).

19. Referencing claim 7, as closely interpreted by the Examiner, Tunncliffe determining a change in network capacity (DCNC) is a function of one or more of the following:

20. a current utilization (CU) of the network, a growth trend of a utilization of the network, or a cost measure of a capacity to be added to the network , (e.g., col. 3, lines 22 – 55).

21. Referencing claim 8, as closely interpreted by the Examiner, Tunncliffe teaches said current utilization (CU) of the network is indicative of a high percent usage of a present capacity of the network (PNC) for a particular percentage of time , (e.g., col. 4, lines 20 – 59, col. 5, lines 4 – 55).

22. Referencing claim 9, as closely interpreted by the Examiner, Tunncliffe teaches the growth trend is based on a regression of data representative of a past growth of the utilization of the network , (e.g., col. 4, lines 20 – 59, col. 5, lines 4 – 55).

23. Referencing claim 10, as closely interpreted by the Examiner, Tunncliffe teaches determining a total demand of users (TUD) for the network at each of the future times is a function of determining a present demand of users (PUD) for the network and determining a change in demand of users (CUD) for the network between a present time and each of the future times , (e.g., col. 4, lines 20 – 59, col. 5, lines 4 – 55).

24. Referencing claim 11, as closely interpreted by the Examiner, Tunnickliffe teaches determining an anticipated change in demand of users (CUD) for the network comprises determining a demand requirement for a roll-out of an application operating via the network , (e.g., col. 4, lines 20 – 59, col. 5, lines 4 – 55).

25. Referencing claim 12, as closely interpreted by the Examiner, Tunnickliffe teaches determining a predicted utilization (PU) of the network at each of the future times comprises dividing the total demand of users (TUD) for the network by the total capacity of the network (TNC) at each of the future times , (e.g., col. 4, lines 20 – 59, col. 5, lines 4 – 55).

26. Referencing claim 13, as closely interpreted by the Examiner, Tunnickliffe teaches the acceptable utilization of the network is a function of a response time of an application operating via the network , (e.g., col. 3, lines 22 – 55).

27. Referencing claim 14, as closely interpreted by the Examiner, Tunnickliffe teaches the response time of the application is a function of one or more of the following:

28. a distance between a client and a server of the application wherein said client and server are coupled to the network, a connection speed of the client to the network, or a utilization of the network during a period of time at which the client accesses the application , (e.g., col. 4, lines 20 – 59, col. 5, lines 4 – 55).

29. Referencing claim 15, as closely interpreted by the Examiner, Tunncliffe teaches planning a budget for applying the determined change in network capacity (DCNC) to the network and determining a cost measure of the determined change in network capacity (DCNC) , (c.g., col. 4, lines 20 – 59, col. 5, lines 4 – 55).

30. Claims 16 – 41 are rejected in the same light as the above claims and their teachings can also be found in the above cited areas of the prior art.

Response to Arguments

31. Applicant's arguments with respect to claims 1 – 41 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

32. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID E. ENGLAND whose telephone number is (571)272-3912. The examiner can normally be reached on Mon-Thur, 7:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan J. Flynn can be reached on 571-272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

David E. England
Examiner
Art Unit 2143

/D. E. E./
Examiner, Art Unit 2143

/Nathan J. Flynn/
Supervisory Patent Examiner, Art Unit 2154